



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460
BIOSOLIDS ANNUAL REPORT

FORM
Approved OMB No.
2040-0004

EPA's sewage sludge regulations require certain publicly owned treatment works (POTWs) and Class I sewage sludge management facilities to submit to a Sewage Sludge (Biosolids) Annual Report (see 40 CFR 503.18 (https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_118), 503.28 (https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_128), 503.48 (https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_148)). Facilities that must submit a Sewage Sludge (Biosolids) Annual Report include POTWs with a design flow rate equal to or greater than one million gallons per day, POTWs that serve 10,000 people or more, Class I Sludge Management Facilities (as defined by 40 CFR 503.9 (https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_19)), and facilities otherwise required to file this report (e.g., permit condition, enforcement action, state law). This is the electronic form for Sewage Sludge (Biosolids) Annual Report filers to use if they are located in one of the states, tribes, or territories (<https://www.epa.gov/npdes/npdes-state-program-information>) where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' (https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_19) also refers to the material that is commonly referred to as 'biosolids'. EPA does not have a regulatory definition for biosolids but this material is commonly referred to as sewage sludge that is placed on, or applied to the land to use the beneficial properties of the material as a soil amendment, conditioner, or fertilizer. EPA's use of the term 'biosolids' in this form is to confirm that information about beneficially used sewage sludge (a.k.a. biosolids) should be reported on this form.

Please note that EPA may contact you after you submit this report for more information regarding your sewage sludge management program.

Facility Information

Facility Name: EUREKA ELK RIVER WWTP

Program Information

Please select at least one of the following options pertaining to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR part 503. The facility is:

- ☒ a POTW with a design flow rate equal to or greater than one million gallons per day

In the reporting period, did you manage your sewage sludge or biosolids using any of the following management practices: land application, surface disposal, or incineration? ☒ YES
☐ NO

If your facility is a POTW, please provide the estimated total amount of sewage sludge produced at your facility for the reporting period (in dry metric tons). If your facility is not a POTW, please provide the estimated total amount of biosolids produced at your facility for the reporting period (in dry metric tons).

688

Reporting Period Start Date: 01/01/2018

Reporting Period End Date: 12/31/2018

Treatment Processes

Processes to Significantly Reduce Pathogens (PSRP):

Anaerobic Digestion

Processes to Further Reduce Pathogens (PFRP):

Physical Treatment Options:

Thickening (e.g., gravity and/or flotation thickening, centrifugation, belt filter press, vacuum filter)
Sludge Lagoon
Preliminary Operations (e.g., sludge grinding, dewatering, blending)

Other Processes to Manage Sewage Sludge:

Methane or Biogas Capture and Recovery

Analytical Methods

Did you use any analytical methods to analyze sewage sludge in the reporting period? ☒ YES ☐ NO

Analytical Methods

- ☐ EPA Method 6010 - Arsenic (ICP-OES)
- ☐ EPA Method 6010 - Cadmium (ICP-OES)
- ☐ EPA Method 6010 - Chromium (ICP-OES)
- ☐ EPA Method 6010 - Copper (ICP-OES)
- ☐ EPA Method 6010 - Lead (ICP-OES)
- ☐ EPA Method 7471 - Mercury (CVAA)
- ☐ EPA Method 6010 - Molybdenum (ICP-OES)
- ☐ EPA Method 6010 - Nickel (ICP-OES)
- ☐ EPA Method 6010 - Selenium (ICP-OES)
- ☐ EPA Method 6010 - Zinc (ICP-OES)
- ☐ Standard Method 4500-N - Nitrogen
- ☐ Standard Method 4500-NH3 - Ammonia Nitrogen
- ☐ Standard Method 4500-Norg - Organic Nitrogen
- ☐ Standard Method 2540 - Total Solids
- ☐ EPA Method 9045 - pH (> 7% solids)

Sludge Management - Land Application

ID: 001

Amount: 682

Management Practice Detail: Agricultural Land Application

Bulk or Bag/Container: Bulk

Handler, Preparer, or Applier Type: Off-Site Third-Party Handler or Applier

NPDES ID of handler:

Facility Information:Synagro
3110 Gold Canal Drive, Suite E
Rancho Cordova, CA 95670**Contact Information:**John Pugliesi
M:
650-652-6531
jpugliesi@synagro.com

Pathogen Class: Class B

Sewage Sludge or Biosolids Pathogen Reduction Options:

- Class B-Alternative 2 PSRP 3: Anaerobic Digestion

Sewage Sludge or Biosolids Vector Attraction Reduction Options:

- Option 1 - Volatile Solids Reduction

Did the facility land apply bulk sewage sludge when one or more pollutants in the sewage sludge exceeded 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of 40 CFR 503.13?

☐ YES ☒ NO ☐ UNKNOWN**Monitoring Data**

INSTRUCTIONS: Pollutants, pathogen densities, and vector attraction reduction must be monitored when sewage sludge or biosolids are applied to the land. Please use the following section to report monitoring data for the land application conducted by you or your facility in the reporting period for this SSUID. These monitoring data should be representative of the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID (40 CFR 503.8(a) (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_18)). All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis. EPA will be using these data to demonstrate compliance with EPA's land application requirements (40 CFR 503, Subpart B).

Compliance Monitoring Periods

INSTRUCTIONS: Please use the table below to identify the start date and end date for each compliance monitoring period. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (40 CFR 503.16 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_116)).

Compliance Monitoring Event No. 1

Compliance Monitoring Period Start Date: 01/01/2018

Compliance Monitoring Period End Date: 03/31/2018

Do you have analytical results to report for this monitoring period? ☒ YES ☐ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☒ YES ☐ NO**Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	7.1	
Cadmium	=	5.6	
Copper	=	970	
Lead	=	60	
Mercury	=	3	
Molybdenum	=	17	
Nickel	=	28	
Selenium	=	12	
Zinc	=	1300	

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	7.1	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Copper	=	970	
Lead	=	60	
Mercury	=	3	
Nickel	=	28	
Selenium	=	12	
Zinc	=	1300	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	41000	

Compliance Monitoring Event No. 2

Compliance Monitoring Period Start Date: 04/01/2018

Compliance Monitoring Period End Date: 06/30/2018

Do you have analytical results to report for this monitoring period? ☒ YES ☐ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☒ YES ☐ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.9	
Cadmium	=	6.7	
Copper	=	1000	
Lead	=	63	
Mercury	=	2.4	
Molybdenum	=	17	
Nickel	=	33	
Selenium	=	8.6	
Zinc	=	1300	

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.9	
Cadmium	=	6.7	
Copper	=	1000	
Lead	=	63	
Mercury	=	2.4	
Nickel	=	33	
Selenium	=	8.6	
Zinc	=	1300	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
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Total Nitrogen (TKN plus Nitrate-Nitrite) Sewage Sludge or Biosolids Parameter	=	3000 Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
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Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 07/01/2018 Compliance Monitoring Period End Date: 09/30/2018

Do you have analytical results to report for this monitoring period? ☒ YES ☐ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☐ YES ☒ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	12	
Cadmium	=	4.6	
Copper	=	900	
Lead	=	52	
Mercury	=	2.6	
Molybdenum	=	8.7	
Nickel	=	32	
Selenium	=	8.6	
Zinc	=	1240	

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8	
Cadmium	=	4.6	
Copper	=	890	
Lead	=	52	
Mercury	=	1.3	
Nickel	=	32	
Selenium	=	7.2	
Zinc	=	1200	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	47000	

Compliance Monitoring Event No. 4 Compliance Monitoring Period Start Date: 10/01/2018 Compliance Monitoring Period End Date: 12/31/2018

Do you have analytical results to report for this monitoring period? ☒ YES ☐ NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]

☐ YES ☒ NO

Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 (http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113) to identify noncompliance events. All pollutant monitoring data should be reported in

milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	28	
Cadmium	=	7.1	
Copper	=	1180	
Lead	=	119	
Mercury	=	2.9	
Molybdenum	=	17	
Nickel	=	37	
Selenium	=	8.9	
Zinc	=	1700	

Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	11	
Cadmium	=	6.7	
Copper	=	1140	
Lead	=	88	
Mercury	=	2.7	
Nickel	=	35	
Selenium	=	6.9	
Zinc	=	1550	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	43000	

Sludge Management - Surface Disposal

Sludge Management - Incineration

Sludge Management - Other Management Practice

Additional Information

Please enter any additional information that you would like to provide in the comment box below.

Additional Attachments

Name	Created Date	Size
Biosolids 2018-12 monthly.pdf	02/08/2019 1:16 PM	684.11 KB
Biosolids 1 of 4(2018).pdf	02/08/2019 1:16 PM	820.55 KB
Biosolids 2 of 4(2018) and Annual.pdf	02/08/2019 1:16 PM	914.23 KB

Name	Created Date	Size
Biosolids 2018-08 monthly.pdf	02/08/2019 1:16 PM	573.76 KB
Biosolids 2018-09 monthly.pdf	02/08/2019 1:16 PM	532.53 KB
Biosolids 2018-10 semi-annual.pdf	02/08/2019 1:16 PM	567.36 KB
Biosolids 2018-11 monthly.pdf	02/08/2019 1:16 PM	538.61 KB
EUREKA - 2018 Biosolids Management Annual Report.pdf	02/08/2019 1:19 PM	499.34 KB

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Certified By: Michael P. Hansen (EUREKAWATER)

Certified On: 02/08/2019 1:21 PM